

BUILDING DIVISION

PLAN CHECK NOTE

From: Building Plan Check

PCN #10

Previous Version: none

Date: 1-2-2008

**Subject: Minimum braced wall length for single family residence
in the City of San Jose**

Code reference:

2007 CBC, sec 2308: Conventional Light Frame Construction, Table 2308.12.4: Wall bracing in seismic design categories D and E.

Purpose:

The 2007 CBC requirements for conventional construction have been substantially revised. The required amount of bracing now depends on proximity to fault lines based on spectral response acceleration parameter S_{DS} . To facilitate implementation of these new standards, the following information is provided.

Findings:

All of the City of San Jose is either seismic design category D or E (which are high to very high seismic vulnerability and near a major fault) As a result, table 2308.12.4 must be used. The required length of bracing is based on S_{DS} . Most of the areas of San Jose have a value of $S_{DS} = 1$, and the south west portion have S_{DS} as high as 1.6.

Zip codes	Value of S_{DS}
95129, 95130, 95124, 95118, 95120, 95008	$S_{DS} > 1.00$ for the entire area. Only these zip codes contain the areas that are seismic design category E.
95117, 95125, 95136, 95123	$S_{DS} > 1.00$ for a portion of this area. Entire area to be designed with $S_{DS} > 1.00$ unless site specific information is provided by the designer. (Include the site latitude and longitude)
All other zip codes	$0.75 \leq S_{DS} \leq 1.00$

Minimum length of wall bracing required per 25 feet of wall line

Condition	Sheathing Type	$0.75 \leq S_{DS} \leq 1.00$	$S_{DS} > 1.00$
One story, or top story of two story	G-P Plywood	18 ft 8 in 9 ft 4 in	25 ft 0 in 12 ft 0 in
First floor of two story	G-P Plywood	Not permitted 17 ft 4 in	Not permitted 21 ft 4 in

The use of alternate braced panels (2308.9.3.1), special alternate braced panels (2308.9.3.2), or manufactured panels will be credited for 5 feet of the required wall bracing for each panel installed. The use of manufactured panel is subject to the limitations of the ICC report for that product.

For G-P, see the City adoption ordinance and applicable building code sections for allowable materials.